CALIFORNIA CHILDREN AND FAMILIES COMMISSION
PROJECT PROPOSAL

AGENDA ITEM #: 9
DATE OF MEETING: November 21, 2002
ACTION: X

PROJECT TITLE: FIRST 5 CALIFORNIA ORAL HEALTH INITIATIVE

A. SUMMARY OF REQUEST

This is an action item to approve $10 million to support the First 5 California Oral Health Initiative. With a strong emphasis on primary prevention[1], the goal of this Oral Health Initiative is to significantly reduce the incidence of dental decay in the current generation of young children (prenatal through age 5) and beyond. This initiative will specifically support:

1. **Education and Training Project - $7 million for four years (of which a minimum of $1 million will support the Consumer Oral Health Education Program component).** This Project is comprised of two major components:
   a. Provider Education and Training Program targeted to the medical and dental community
   b. Consumer Oral Health Education Program targeted to parents and other caregivers
2. **Insurance-based Oral Health Demonstration Project - $3 million for three years.**

There are other proposed components of the Oral Health Initiative that are targeted for further discussion (e.g., policy/advocacy, research, Kit for New Parents, and public education campaign/media). Please refer to Section D.

The First 5 California Oral Health Initiative will be developed, implemented and evaluated in conjunction with an Early Childhood Oral Health Advisory Committee, composed of representatives from County Commissions, the Advisory Committee on Diversity, dental and medical primary care providers, training institutions, and others.

[1] In addition to prevention, the First 5 California Oral Health Initiative also focuses on:

- System improvements (e.g., systematic approaches and strategies) versus the funding of direct service delivery;
- Multi-disciplinary approach, inclusive of a broad spectrum of dental and medical providers who are or could be providing preventive oral health services to young children and their families;
- School Readiness—oral health services must be coordinated and well-integrated with School Readiness programs;
- Principles on Equity—a major focus is on increasing access to care for all children including children with disabilities and other special needs.
- Sustainability—The First 5 California Oral Health Initiative should not be viewed as ongoing categorical funding. This program must build upon existing efforts and strive to become an integral component of other First 5 California Programs and others.

B. BACKGROUND AND HISTORY

Armed with the knowledge that Early Childhood Caries (ECC) is the most prevalent chronic disease of early childhood[2] and a major cause of school absenteeism, the State Commissioners selected Early Childhood Oral Health as one of its focus areas. A set of preliminary oral health recommendations was presented to the State Commissioners on June 20 and July 18, 2002. At these meetings, various program and policy options (e.g., reimbursement, fluoridation, research, public awareness) in the oral health arena were discussed. It was determined that the best niche for First 5 California given its mission and its significant investment in the School Readiness Initiative was to focus our effort in addressing the following unmet needs that were consistently identified**:**

- Insufficient understanding and education of parents, families, caregivers and community service providers, of the importance of early oral health care for their young children.
- Inadequate supply, training and education of providers to provide more oral health preventive care and treatment to young children.
- Inadequate baseline data. Limited population-based oral health data is available on California's youngest children (birth-5).

During the course of developing the Oral Health Discussion Paper and subsequently, First 5 CCFC staff solicited input from a variety of different groups and organizations in order to determine the best niche for First 5 CCFC in the oral health arena and the type of strategies and approaches that it should support for both short and long term benefit and maximum impact. As a result, communication was established with a number of dental programs and provider groups (e.g., state agencies, professional associations, coalitions, dental schools, dental and health plans, community clinic associations, and many others). A concerted effort was also made to obtain input and guidance from the County Commissions largely through its Oral Health Workgroup. In September 2002, the California Children and Families Association (CCAFA) conducted a survey of its membership to learn more about their views on the recommendations presented in the Oral Health Discussion Paper. The survey findings show that overall, the respondents were supportive of the Oral Health recommendations. The survey results indicated that the respondents had the strongest preference for the Demonstration Projects and the Training Component, followed by the Policy/Advocacy and the Public Education Campaign. Research/Evaluation was less favorably received.

[2] An excerpt of the Oral Health Discussion Paper is attached (Attachment 1) that provides additional information on the prevalence and severity of Early Childhood Caries and other background information.

C. PROPOSAL

The two major projects of the First 5 California Oral Health Initiative are:

1. Education and Training Project funded at $7 million for four years (of which a minimum of $1 million will support the Oral Health Education Program component). This Project is comprised of two components:
   a. Provider Education and Training Program targeted to the medical and dental community
   b. Consumer Oral Health Education Program targeted to parents and other caregivers
2. Insurance-based Oral Health Demonstration Project funded at $3 million for three years.

1. THE EDUCATION AND TRAINING PROJECT

The Education and Training Project has two major areas of focus:

a. Provider Education and Training Program targeted to the medical and dental community, and
b. Consumer Oral Health Education Program targeted to parents and other caregivers.

The Education and Training effort is focused on the prevention of Early Childhood Caries and the promotion of Early Childhood Oral Health. The Education and Training activities will be carried out under the guidance of an Oral Health Advisory Committee composed of representatives from County Commissions, Advisory Committee on Diversity, dental and medical primary care providers, clinics (including migrant and farmworker clinics), training institutions, and others.

Over a period of four years, the Education and Training Project will provide various levels of training and education services to the provider community and the public. To maximize First 5 CCFC's desire to build on and strengthen existing resources, the Project has been designed to partner with entities throughout the state that have a mandate and the ongoing responsibility for training health and dental providers. The products produced through this project will be designed for the long-term use by these entities and others.

a. Provider Education and Training Program

Rationale - It is widely recognized that the existing pool of dental and medical providers (e.g., general dentists, dental hygienists, dental assistants, primary care physicians, mid-level medical practitioners, nurses, including school nurses) could be utilized to a greater degree in the prevention and treatment of Early Childhood Caries. The reasons that the current provider community has not been fully engaged in this arena are complex and multi-factorial (e.g., dental coverage, reimbursement, standards of practice, scope of practice, lack of training, reluctance to treat children). Although there is no simple answer to this dilemma, there is a consensus among a broad spectrum of private and public providers that training would need to be an essential component in this effort to change provider practice and improve providers'

capacity to better serve the oral health needs of the diverse populations of young children in California, particularly in light of new scientific findings relevant to the prevention of early childhood caries (e.g., bacterial transmission). Because primary preventive and education services can be performed by both dental and medical providers, it is critical to have training strategies tailored to both types of providers and that these trainings be conducted in collaboration with training institutions throughout the State.

Outcomes - The desired outcomes of the Provider Education and Training Program are to broaden the range of providers providing oral health education and preventive services to young children and to improve the quality of these services. With a focus on addressing the gaps in information and skills relevant to children's oral health services, incorporating the latest scientific findings, and other barriers to services (e.g., reluctance to treat children), the Provider Education and Training Program will be designed to:

1. Provide education and training to dental providers (general dentists, dental hygienists, dental assistants, etc.) to improve their level and quality of oral health services (education, screening, and preventive and treatment services) to young children (birth-5), targeting providers serving children in School Readiness catchment areas and other areas of high need. Over the course of this four-year program, it is anticipated that the majority (approximately 75%) of the dental provider community will be provided pertinent general education materials and resources (for example, behavior management techniques for young patients, the latest scientific findings pertinent to the prevention of early childhood caries) and at least 30% of the dental provider community will be provided with more intensive training programs on children's oral health (e.g., infant oral healthcare programs, current preventive and diagnostic procedures).
2. Provide education and training to primary care medical providers to improve their level and quality of oral health services (education, screening, and selected preventive services as part of well-child exams) to young children (birth-5), targeting providers serving children in School Readiness catchment areas and other areas of high need. Over the course of this four-year program, it is anticipated that a significant proportion (50%) of the primary care provider community will be provided with pertinent education and resources relevant to children's oral health and at least 20% will be provided with more intensive training programs.

Strategies - To achieve these objectives, this Program should offer a variety of different types and levels of interventions:

- To maximize the amount of coverage, this Project should include an educational strategy that provides a suitable amount of information and materials to the majority of the provider community.

- To address specific skill and behavioral competencies, the Project will offer a range of training opportunities (e.g., workshops through more intensive multi-day programs with "hands-on" learning opportunities) to a smaller percentage of the provider community.
- This Provider Education and Training program will be designed and conducted at two major levels:
  - In-service training--In conjunction with entities such as local professional associations/societies, County Commissions, primary care clinics, and migrant health centers, offer training sessions throughout the State for medical and dental providers to expand the current pool of providers who provide preventive oral health services to young children. The priority for these trainings would be given to providers serving School Readiness Initiative catchment areas and other high need areas identified by County Commissions and through analysis of prevalence data.
  - Pre-service Training--Partner with dental and medical training programs through California's colleges and universities, professional associations, etc., to address the oral health needs of young children and pregnant women as part of their curriculum. This will help institutionalize this training for future providers.

Tasks/Deliverables - The specific tasks/deliverables for the Provider Education and Training Program include:

- **Education and Training Programs for Providers.** It is expected that the training program and curriculum will be designed to address the needs of a broad spectrum of medical and dental providers. The training materials should utilize and build on existing curricula, materials, and protocols where they are available. The training curriculum and training materials must be culturally competent and address services to children with disabilities and other special needs. The curriculum must identify specific behavioral, attitudinal (e.g., many providers are reluctant to treat young children), and knowledge training objectives and the competency levels. The curriculum should be designed so that it can be modified as needed to meet specific needs based on provider type (e.g., skill level) and the training design (e.g., intensity, format, multi-disciplinary audiences). The trainings should utilize a variety of teaching modalities, including but not limited to interactive and hands-on experiences, train-the-trainer models, self-study guides, mentoring, and distance learning opportunities. On-going support to the trainees (e.g., website) would also need to be offered. In addition, an educational packet of material and resources on early childhood oral health should be developed for use in the trainings and for wider distribution throughout the provider community.

- **Number of Trainees.** Although our target of the number of providers to be trained are those stated on page 4, the actual number of providers to be trained and the cost per training will be largely determined by the type of format/modalities, training objectives (knowledge, attitudinal, skill-based) and intensity (length, number of sessions). For instance, if a train-the-trainer model is used, the numbers trained directly will be relatively small, but the total number reached would be exponentially increased. In terms of cost per trainee, some training modalities (web-based, CD-ROM, distance learning, etc.) may have higher developmental costs, but lower implementation costs (and more accessible to partners in more remote parts of the state). Other modalities that may include "hands-on or bench" training opportunities will be more intensive and more costly per trainee. It is anticipated that in some of the more rural communities, the training program offered to general dentists may be more intensive because of the scarcity of pediatric dentists in these areas. Given that there are an estimated 11,000 dental hygienists, 25,000 dentists, 85,000 physicians and 200,000 registered nurses in the state, it is not realistic to think that the trainings offered by this Program could impact them all. For this reason, the more intensive training programs will be strategically targeted to providers serving the communities serving School Readiness sites and other critical service areas in order to receive the maximum benefit for the state's most needy young children. However, it is expected that core educational materials and resources would be made widely available to the provider community.
- **Recruitment.** The recruitment plan must describe the Program's local partners, training incentives, expected numbers and types of providers to be trained, etc.

Evaluation - The goal of this Initiative is not to have simply a more knowledgeable provider workforce on issues pertinent to early childhood oral health, but to increase access to preventive oral health services for young children. Thus, the Education and Training Project will follow up on trainees to ascertain what has been the effect on the accessibility (e.g., increased number of young children being served) and quality of oral health services (e.g., a full range of preventive services offered) for young children in their individual practices.

b. Consumer Oral Health Education Program

Rationale - Based on the latest advancements in the scientific understanding of the etiology and means of preventing or significantly reducing the prevalence of Early Childhood Caries, it is critical that oral health messages targeted to pregnant women, parents, other caregivers and health and human service providers of young children are effective and communicate the most current information available. With young children, the prevention message needs to extend beyond brushing and flossing. Referred to as the "paradigm shift," a key message to emphasize with parents and caregivers of young children is that preventing bacterial transmission from caregiver

to the child is a critical step towards the prevention of early childhood caries. Most parents and caregivers are currently unaware that their seemingly innocuous actions (e.g., tasting food, placing a pacifier in their own mouth, etc.) are actually a primary cause of the dental decay in their child.

Outcome - The desired outcome of this Consumer Oral Health Education Program is to increase the awareness and knowledge of parents and other caregivers, families, and community service providers about the importance of early oral health care for young children and about the necessary actions needed to prevent dental decay. The primary audience to be targeted by this effort are the parents and caregivers receiving care from providers trained through the Provider Education and Training Program. The secondary audience targeted by this effort would include other parents and caregivers of young children served by other First 5 California programs and other programs serving young children and pregnant women (WIC, prenatal clinics, child development centers, etc.).

Tasks/Deliverables - The Consumer Oral Health Education Program would include the following tasks.

- Working with the Initiative's Advisory Committee, identify key oral health messages and materials targeted to parents and other caregivers for use by the dental and health providers, as well as for distribution through other First 5 California programs (e.g., School Readiness programs, Child Care Health Linkages) and other venues, as appropriate. Key messages would need to be communicated in multiple languages and should be targeted to specific population groups at greatest risk for dental disease (including children with disabilities and other special needs).
- Reviewing existing materials (in multiple languages, culturally relevant, appropriate literacy level, different formats), including materials currently used by First 5 California (e.g., Kit for New Parents) and those developed by the County Commissions (e.g., the East Steps to Oral Health video series developed with partial support from the Monterey and Ventura County Children and Families Commissions). As material gaps (e.g., topic, language) are identified, a small number of key products will be developed and produced but otherwise existing materials will be used or modified as needed.
- Producing and distributing materials to the providers receiving training through the Provider Education and Training Program for use with their patients and exploring other possible venues and partnerships for material distribution (e.g., County Commissions, School Readiness programs, child development centers, prenatal clinics, pediatricians' offices, Regional Centers, WIC clinics).

Evaluation – The contractor will evaluate its efforts (e.g., field testing messages and materials, consumer satisfaction), and track the materials developed, produced and distributed.

Funding Request: A total of $7 million is being requested to support this four-year Education and Training Project, of which at least $1 million is specifically designated to support the Consumer Oral Health Education component.

Bidding Process/Contractor Procurement: Through an open and competitive procurement process, the First 5 CCFC will select a contractor to develop, implement and evaluate the Education and Training Project of the First 5 California Oral Health Initiative. This contractor would also serve as a technical advisor to the State Commission (e.g., policy development, research) and the County Commissions relevant to their own funded oral health programs.

First 5 CCFC will encourage interested parties to consider submitting a joint application to collectively accomplish the various aspects associated with the Education and Training Project. The contractor and its subcontractors must meet the following minimum criteria:

- Knowledgeable in the field of childhood caries prevention and treatment.
- Knowledgeable and possess a positive track record in training of medical and dental providers. Experience with different training modalities and formats (e.g., bench trainings, distance learning).
- Knowledgeable and experienced in working with both private and public medical and dental providers, and expert in their training needs and preferences.
- Established track record with working with dental and medical training institutions in California.
- Familiar and experienced in working within the local and regional infrastructure of the medical and dental provider communities in California.
- Capacity and experience in conducting a statewide training program.
- Experience in working with a broad spectrum of medical and dental providers, including mid-level practitioners and auxiliaries.
- Familiar with the fiscal and regulatory environment pertinent to the delivery of oral health preventive and treatment services in California.
- Knowledgeable and experienced in developing culturally and linguistically appropriate consumer education materials.

Evaluation of the Combined Components of the Education and Training Project: The contractor will be responsible for both the formative and impact evaluation to determine if and to what extent the following indicators have improved:

- Awareness and knowledge level among parents and caregivers about ways to prevent dental decay and promote oral health with young children.
- Knowledge and skill level of medical and dental providers in issues and practices pertinent to the oral health of young children (birth-5).
- Level and amount of services provided to young children by General Dentists and auxiliaries who received training through the First 5 Oral Health Initiative.

- Level and amount of oral health education and preventive services provided to young children by medical providers who received training through the First 5 Oral Health Initiative.

The evaluation findings will be used to make program improvements and enhancements as indicated.

2. THE INSURANCE-BASED ORAL HEALTH DEMONSTRATION PROJECT

First 5 CCFC is proposing to support an Insurance-based Oral Health Demonstration Project in partnership with the Managed Risk Medical Insurance Board (MRMIB) and the Healthy Families Program.

Rationale - This type of demonstration project is recommended because it:

- Partners with a number of organizations (including dental plans) and service agencies (including safety net providers) that provide oral health services to low-income children and in targeted communities,
- Presents an opportunity to leverage additional federal funds ($2 of federal funds for each $1 of First 5 CCFC funding), and
- Creates an opportunity to review and improve policies and procedures affecting the delivery and accessibility of oral health services for young children.

Outcomes - As a part of this Insurance-based Oral Health Demonstration Project, dental and health plans will partner with dental providers, clinics (safety net community), dental schools, and pediatric care providers to develop proposals to test innovative ways to:

- Increase the utilization of preventive dental benefits among young children;
- Increase the capacity of medical and dental providers to serve the oral health needs of young children (including children with disabilities and other special needs); and
- Increase the access for young children in rural and frontier areas to dental services.

Strategies - It has been proposed that these insurance-based demonstration projects could employ many of the following strategies:

- Provision of accessible mobile dental services in targeted areas
- Case management
- Rate enhancements
- Hospital-based or surgical center dentistry (including anesthesia services)
- Telehealth/telemedicine networks

These projects would serve as models for improving oral health preventive measures and treatment, and offer the possibility of serving as “mentor” sites disseminating best practices.

Evaluation – The contractor will be responsible for both the formative and impact evaluation to assess the impact of the program on increasing access to oral health services and the quality of such services to young children.

Funding Request: A total of $3 million is being requested to support these demonstration projects over a 3-year funding period. It is anticipated that First 5 CCFC's investment in these projects would leverage an additional $6 million in federal matching funds.

Proposed Contractor: The First 5 CCFC would enter into an Interagency Agreement with the Managed Risk Medical Insurance Board (MRMIB), who oversees the Healthy Families Program, to implement the First Five Oral Health Insurance-based Demonstration Project. In turn, MRMIB would solicit proposals from Healthy Families Plans who would partner with dental and medical providers interested in participating in the program.

Timeline: To permit adequate time to secure the necessary approvals (e.g., a State Plan Amendment to the Healthy Families Program, state budget approval process for MRMIB, Interagency Agreement with MRMIB) and to award funds (e.g., award contract with dental and medical plans), it is anticipated that the Insurance-based Demonstration Project would not be operational until late 2003.

D. First 5 CCFC Policy/Advocacy, Kit for New Parents, Research, and Public Education Campaign Activities

As directed by the Commission, staff has prepared a timeline that outlines when issues will come back to the Commission related to future actions regarding Media and Public Education, Advocacy, and Research for all the Focus Areas as well as other initiatives/ideas. This will allow the Commission to discuss and decide future directions not on a piece meal basis but in a more comprehensive manner. Please refer to the Focus Area Timeline.

Suggestions brought forward for consideration by the Commission are:

Policy and Advocacy

- Increased access to preventive oral health services, such as increasing reimbursement rates, expanding coverage, increasing the supply of provider workforce.
- Expanded scope of practice for dental auxiliaries and medical providers.

Kit for New Parents

- Current information will be assessed and enhanced as needed to assure consistency with the Education and Training Program of this Initiative.
- First 5 CCFC would solicit professional guidance from its Education and Training Program contractor and others in recommending possible additions to the Kit such as a baby toothbrush, new educational materials, etc.

Research

- The most recent pediatric oral health survey in California studied a sample of children attending preschool in 1993-94[3]. It found a variety of significant oral health problems among children. However, as important and groundbreaking as this study was, it had two major limitations:
  - The survey included only children aged 2-5 attending preschool. *Excluded were the 65% of children cared for either by a parent or informal child care provider, and who have a very different socio-economic profile*[4].
  - The information is now nearly 10 years old. *Over this extended period of time significant changes would be expected.*
- A focused, population-based regional needs assessment should be considered to provide an understanding of the current California environment, and serve as a basis for comparison over time. In addition the First 5 CCFC staff would work with County Commission representatives and their local oral health grantees and other stakeholders to identify common data indicators for oral health and accompanying evaluation collection instruments for analysis and reporting.

Media and Public Education - Building on the efforts and products of the proposed Education and Training Project, the First 5 CCFC could research the potential to further promote the link between bacterial transmission and dental caries through its media and public education vehicles.

E. INTERFACE/IMPACT ON OTHER PROGRAMS

The proposed strategies listed above are made in recognition that there are many other ongoing or proposed efforts that address Early Childhood Oral Health in California. The First 5 California Oral Health Initiative is designed to coordinate with these other programs so that together in a comprehensive and integrated manner we can achieve the greatest impact on the oral health of the young children and their families. The following is a list of other entities/programs that this oral health initiative will work with:

- County Commissions and their oral health grantees as members of the Oral Health Advisory Committee for planning and coordinating programs and services.
- Healthy Families and Denti-Cal Programs and their providers in designing the Education and Training Program and the Insurance-based Demonstration Program.
- First 5 California programs, such as the School Readiness Program and the Child Care Health Linkages Program, to strengthen the oral health components of these programs and to ensure consistency of information and materials distributed.

[3] Source: the California Department of Health Services/California Wellness Foundation 1993-94 survey of 6,793 children attending preschool to high school.

[4] Source: the CCFC's 2001 Public Opinion Surveys on Child Care and Early Education - a random sample of 4,801 California parents surveyed in the fall and winter of 2001.

- Various publicly funded oral health programs targeting very young children supported by Department of Health Services, as well as privately funded projects (e.g., The California Endowment, Sierra Health Foundation) to coordinate with their efforts and to encourage their involvement with School Readiness Programs and other First 5 California programs.
- Professional dental and medical associations and organizations to ensure that their members support and participate to the greatest extent possible in the services offered through the First 5 California Oral Health Initiative.

F. ATTACHMENTS

Attachment I: Excerpt from Oral Health Discussion Paper (July 2001)

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Background Section:
According to Healthy People 2010 and the Surgeon General's Report on Oral Health, dental caries is the single most common chronic disease of childhood, occurring five to eight times more frequently than asthma, the second most common chronic disease in children. Early childhood caries (ECC) is dental decay of the primary teeth of infants and young children aged 1 to 5 years often characterized by rapid destruction. Although the data indicates that while the cases of dental caries in permanent teeth of school-aged children have been declining in the U.S. since the early 1970s, cases are increasing in the primary dentition. Primary teeth have an important role; they guide permanent teeth and prevent malocclusions, as well as play a critical role in speech development patterns. An important thing to remember is that dental disease in children is almost entirely preventable. The exact cause of ECCs is most likely multi-factorial. The transfer of infectious organisms from primary caregivers to infant is under study. Infant feeding practices, in which children are put to bed with a bottle, especially if a child falls asleep while feeding, have been associated with ECC. Dental caries remains a significant problem in some populations, particularly certain ethnic groups and poor children. National data indicate that 80 percent of dental caries found in children is concentrated in 25 percent of the child population. The burden of untreated caries falls heaviest on children from low-income families.

Oral health and other experts have indicated that in order to promote oral health and prevent oral diseases, a number of improvements are needed with the personal oral health practices with and for young children and their families and in the dental care delivery systems of the State:

- It is recognized that the earliest opportunity to prevent dental decay in young children occurs during prenatal care visits and with dental services for the pregnant mother. During the prenatal period, a pregnant mother should be provided with education and counseling about diet, oral hygiene practices, appropriate uses of fluorides, and ways to prevent the transmission of bacteria from parents to children. Dental treatment services are critical during the pregnancy because studies point to an association between periodontal diseases and low birth weight and premature births.
- Parental and caregiver education needs to be continually reinforced throughout the early childhood period on how to care for their infants' and toddlers' teeth before the damage is done. Parents and caregivers should be advised to avoid feeding practices that may lead to ECC, and they should be counseled about the appropriate use of fluoride and other preventive measures (e.g., fluoride varnishes, xylitol gum).
- Although appropriate home oral health care is essential, professional care also is necessary to maintain optimal oral health. Regular dental visits provide an opportunity for the early diagnosis, prevention, and treatment of oral and craniofacial diseases and conditions for persons of all ages, as well as for the assessment of self-care practices. Experts recommend that children as young as one year be examined for evidence of developing ECC. Oral health services—preventive and restorative—should be available and accessible to all persons in a culturally competent and linguistically appropriate manner.